



Laparoscopic Evaluation of Chronic Pelvic Pain

Jyotsana Lamba , Surinder Kumar , Shashi Gupta , Neeru Verma

Abstract

The present study was undertaken to find out the role of laparoscopy in evaluation of chronic pelvic pain and to correlate laparoscopic findings with preoperative pelvic findings. Fifty-two women with pelvic pain of more than 6 months duration were included. They were examined clinically and then subjected to Transabdominal sonography and laparoscopy. Of 52 patient's enrolled for study, 51.92% of patients were in the age group of 21-30 years with equal number of cases from rural and urban areas. Abnormal menstrual cycle patterns were seen in 32.70% of patients with menorrhagia contributing 23.07%. 44.24% patients had abnormal pelvic findings on preoperative pelvic examination. Ultrasonography could detect abnormality in 32.70% of patients as compared to Laparoscopy which had abnormal findings in 75%. Most common pelvic pathology was PID in 26.92% followed by adhesions in 12.07% cases which could not be detected clinically and on sonography. Laparoscopy is a more sensitive and superior method for evaluation of chronic pelvic pain as compared to ultrasonography. Laparoscopy can establish a definitive diagnosis, modify and provide treatment without resorting to exploratory laparotomy .

Key Words

Pelvic Pain, Clinical Examination, Ultrasonography, Laparoscopy

Introduction

Chronic pelvic pain (CPP) is best defined as pain localized to pelvis or lower abdomen below the line joining the two anterior superior iliac spines, and of at least six months duration which is severe enough to cause functional disability and requires medical or surgical treatment (1). Chronic pelvic pain accounts for 10% of office visits to gynecologists and general clinics (2). It is responsible for 40% of laparoscopies and 10-15% of hysterectomies in this country.

The causes of CPP are often obscure. Patients with CPP are frequently anxious, depressed and distressed. Though a good gynecologist may obtain considerable information by clinical examination alone, it is not conclusive in many patients. Hence there arises a need for imaging the pelvic organs by USG or for direct visualization of pelvic organs by laparoscopy. Sensitivity of ultrasonography for evaluation of CPP is poor. Till date, laparoscopy has been the gold standard in diagnosis and evaluation of CPP (3). It is an extremely valuable adjunct in gynecologist's armamentarium especially in confirming minimal diseases and adhesions. The placebo effect of diagnostic laparoscopy in women with the absence of pathology on visualization has been reported (4).

The present study was undertaken to find out the role of laparoscopy in evaluation of chronic pelvic pain and to correlate laparoscopic findings with the pre operative pelvic findings in patients of CPP.

Material & Methods

The present study was conducted in the department of Obstetrics and Gynecology S.M.G.S. hospital, Govt. Medical College, Jammu over a period of one year (Dec 2008 - Nov 2009). Cases were selected from the out patient department and those who were admitted in Gynaecology ward. Detailed history was taken including associated symptoms like abnormal vaginal bleeding or discharge, dysmenorrhea, dyspareunia, infertility, enterocolic , urologic and musculo skeletal symptoms. After recording history, clinical examination and routine investigation, USG was done. Patients with obvious non-gynecologic etiology like enterocolic, urologic or musculo skeletal causes were excluded. The study cases (52) were subjected to diagnostic laparoscopy after ruling out exclusion criteria for laparoscopy i.e. extreme obesity, cardiac and respiratory diseases, Diaphragmatic hernia and very large intra abdominal masses (>24wks gestation size)

From the PG Department of Gynae and Obstetrics Govt. Medical College, Jammu (J&K)- India

Correspondence to : Dr. Jyotsana Lamba, Consultant Gynecologist, 67/1, Channi Himmat Jammu (J&K)- 180015- India

Results

Age wise distribution of the cases is shown in the Table-1. Average age of the women in the study was 31.59 years . Half of women belonged to rural and half to urban area. Majority of cases 40 were multipara (76.91) 5 primi para (9.61) and (13.46%) were nullipara .Mean Duration of pain was 3.46 year. Twenty-nine (55.76%) had normal uterus 23(44.24%) had abnormalities on P/V examination which are shown in Fig: 1. All the patients were subjected to USG before diagnostic laparoscopy. In 35(67.30%) USG could not pick any abnormality. Various abnormalities detected on USG are shown Fig. 2 . On diagnostic laparoscopy 39(75%) cases showed positive findings are shown in fig .3 Adhesions were found in 12(23.07%) cases which could not be detected clinically or on USG.

Out of 52 cases 39(75%) had positive findings on laparoscopy but USG could pick positive findings in 16(41.02%) cases which was statistically significant. Table-3 shows comparison of laparoscopy and USG.

Discussion

In the present study, maximum number of cases of CPP (52.92%) belonged to age group 20-30 years, findings similar to Hebbar and Chowla (2), Zuber *et al* (5). Mean duration of pain was 3.46 years. Sebanti *et al* (6) observed mean duration of pain as 2-8 years. Clinical examination could detect abnormality in 23(44.23%) whereas Laparoscopy could detect pathology in 39(75%) women with CPP. This shows superiority of diagnostic laparoscopy over clinical examination in detection of a etiology in these women . USG was found to be 69.56% sensitive 92.305 specific. Positive predictive value was 94.11% and negative predictive value was 34.28% USG could detect abnormal findings in 32.7% of patients where as 75% had abnormal findings on laparoscopy. USG could not detect any abnormality in 35 patients. Out of these 35, 65.71% were positive on laparoscopy. In this study abnormal laparoscopic findings were detected in 39(75%) patients in from of adhesion, PID, myomas ovarian cysts, bulky uterus. Our findings were comparable to these reported by kresch *et al* 83% (7), Vercellini *et al* 62.7%, (8) Kontoravdis *et al* 76% (9) Popora and Gomel 60% (10). The commonest findings in present study was PID as cause of CPP in 14(26.92%) cases similar to Sebanti *et al* 30.3% cases, Maro *et al* (17.7%) (11) as compared to less than 3% in the study of Kontoravdis *et al* (9). Increased incidence of PID in our study probably reflects

Fig 1. Abnormalities on P/V Examination

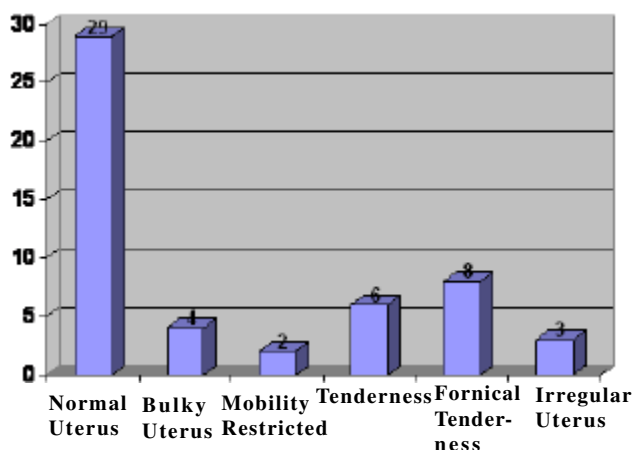


Fig 2. Abnormalities Detected on USG

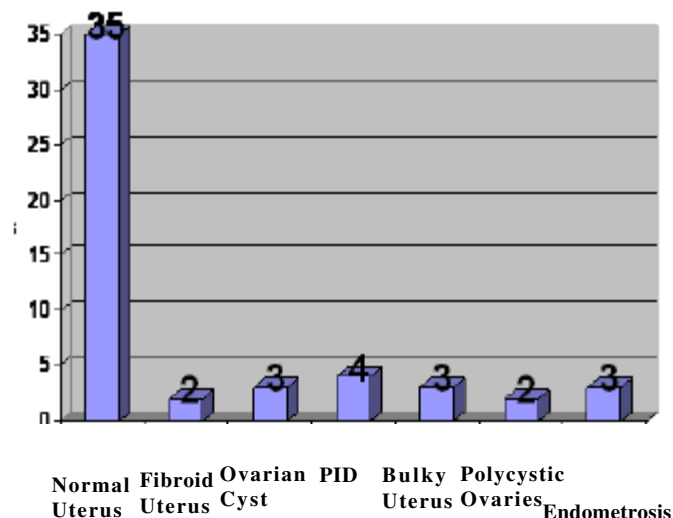
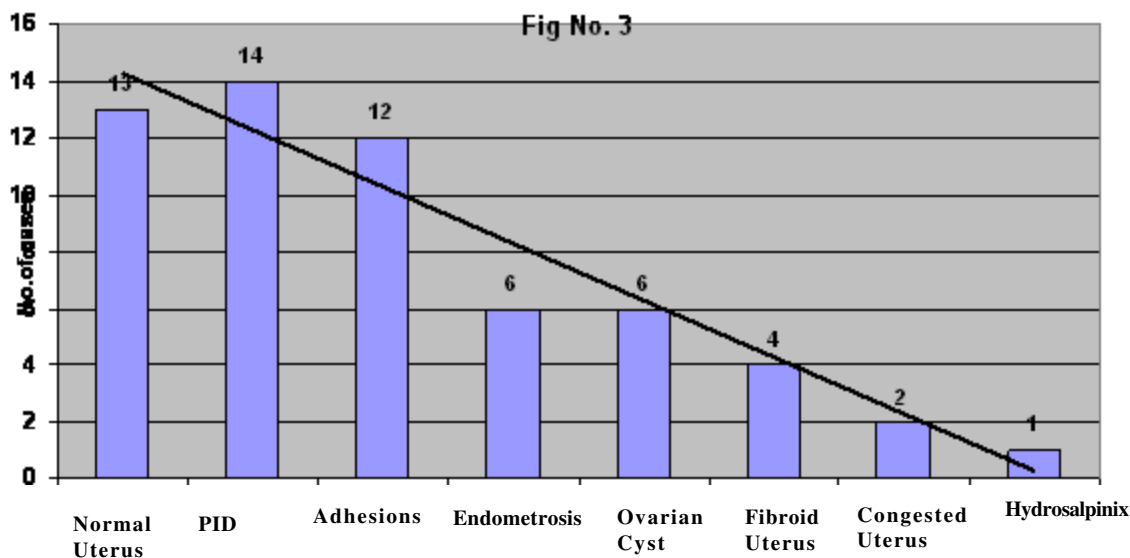


Table-1. Distribution of Cases According to The Age

Age group (in years)	No. of cases(n)	Percentage (%)
20-25	6	11.53
26-30	21	40.38
31-35	12	23.07
36-40	10	19.23
>40	3	5.76
Total	52	100.00

Fig 3. Diagnostic Laparoscopy Findings



changing sexual behavior of women in the reproductive age-group. Adhesions were noted in 12(23.04%) patients as compared to 79.2% by Mettler *et al* (12), 24.81% by Gizwski *et al* (13). Six of these patients had other findings of PID in addition to adhesions. Adhesions were not detected clinically or on USG and this study shows superiority of laparoscopy over USG in detecting adhesions which are one of the most important and common etiological factor in pain causation.

Conclusion

Although laparoscopic Evaluation is sometimes considered a routine part of diagnosis, ideally the decision to perform a laparoscopy should be based on history, physical examination, findings on non invasive tests. Laparoscopy triumphs in detecting many abnormalities which clinical methods and USG sometimes fail to identify. This enforces position of laparoscopy as a gold standard in the evaluation of chronic pelvic pain.

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